



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1459  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,096	01/17/2002	James L. Chappuis	4002-2923/PC664.00	5835

7590

01/30/2004

Woodard, Emhardt, Naughton, Moriarty and McNett  
Bank One Center/Tower  
Suite 3700  
111 Monument Circle  
Indianapolis, IN 46204-5137

EXAMINER

BAXTER, JESSICA R

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 01/30/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,096

Applicant(s)

CHAPPUIS ET AL.

Examiner

Jessica R Baxter

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 6-8, 12 and 26-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11 and 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Group I and Species Grouping D in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 9-11 and 13-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,591,170 to Spievack et al.

Regarding claim 1, Spievack discloses a surgical instrument, comprising: an elongate member (220) extending along an axis; and at least one cutting element (320) engaged with said elongate member and being transitionable between a retracted configuration and an expanded configuration; and wherein axial displacement of said at least one cutting element relative to said elongate member causes said at least one cutting element to transition between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 2, Spievack discloses that said elongate member and said cutting element define bearing surfaces slidably engaging one another during said axial displacement, at least one of said bearing surfaces including a ramped section

configured to transition said cutting element between said retracted and expanded configurations during said axial displacement (FIGS 8 and 9).

Regarding claim 3, Spievack discloses that said elongate member defines an axial channel including a ramped section (FIGS. 8 and 9), said at least one cutting element being at least partially disposed within said channel and slidably displaced along said ramped section to transition said cutting element between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 4, Spievack discloses an actuator mechanism engaged with said elongate member and coupled to said at least one cutting element (418), wherein axial displacement of said actuator mechanism relative to said elongate member slidably displaces said cutting element along said ramped section of said channel to transition said cutting element between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 5, Spievack discloses that said actuator mechanism comprises a collet (attached to top of trigger 418) slidably engaged about said elongate member wherein axial displacement of said collet relative to said elongate member slidably displaces said cutting element along said ramped section of said channel to transition said cutting element between said retracted and expanded configurations.

Regarding claim 9, Spievack discloses that a portion of said elongate member defines a tapping thread (610) configured to cut threads along the first portion of the passage.

Regarding claim 10, Spievack discloses a surgical instrument, comprising: an elongate member (220); a first cutting element disposed along said elongate member

Art Unit: 3731

for forming a first portion of a passage in bone (610); and a second cutting element (320) disposed along said elongate member and being transitionable between a retracted configuration for extending through the first portion of the passage and an expanded configuration for forming a second portion of the passage having an enlarged cross-section (Column 5 line 43 – Column 6 line 34).

Regarding claim 11, Spievack discloses that said first cutting element comprises a tapping thread (610).

Regarding claim 13, Spievack discloses that said first cutting element comprises a distal end portion of said elongate member (FIG. 10).

Regarding claim 14, Spievack discloses that said distal end portion of said elongate member is configured to be self-drilling and self-tapping (Column 6 lines 35-45).

Regarding claim 15, Spievack discloses that said second cutting element comprises a cutting blade (320) extending laterally from said elongate member when transitioned toward said expanded configuration.

Regarding claim 16, Spievack discloses that said elongate member defines a channel extending along an axis with said cutting blade being at least partially disposed within said channel (FIG. 10), at least one of said channel and said cutting blade including a ramped section (FIGS 9 and 10) configured to transition said cutting blade between said retracted and expanded configurations when said cutting blade is axially displaced along said channel.

Regarding claim 17, Spievack discloses an actuator mechanism (418) engaged with said elongate member and coupled to said cutting blade, wherein axial displacement of said actuator mechanism relative to said elongate member axially

Art Unit: 3731

displaces said cutting blade along said channel to transition said cutting blade between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 18, Spievack discloses that said first cutting element comprises a tapping thread (610) and wherein said second cutting element comprising a cutting blade (320).

Regarding claim 19, Spievack discloses that said cutting blade includes a cutting edge having a profile corresponding to a profile of said tapping thread (FIG. 10).

Regarding claim 20, Spievack discloses a surgical instrument, comprising: an elongate member (220); a tapping thread (610) defined along a portion of said elongate member; and a cutting blade (320) engaged with said elongate member and being transitionable between a retracted configuration for extending through the threaded portion of the passage and an expanded configuration (Column 5 line 43 – Column 6 line 34).

Regarding claim 21, Spievack discloses that said elongate member defines an axial channel including a ramped section (FIGS. 8 and 9), said cutting blade being at least partially disposed within said channel and slidably displaceable along said ramped section to transition said cutting blade between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 22, Spievack discloses a collet (attached to top of trigger 418 in FIG. 10) engaged with said comprises a collet slidably engaged about said elongate member and coupled to said cutting blade so that axial displacement of said collet relative to said elongate member slidably displaces said cutting blade along said

Art Unit: 3731

ramped section of said channel to transition said cutting blade between said retracted and expanded configurations (Column 5 line 43 – Column 6 line 34).

Regarding claim 23, Spievack discloses that said cutting blade (320) includes a cutting edge having a profile corresponding to a profile of said tapping thread (FIG. 10).

Regarding claim 24, Spievack discloses a surgical instrument, comprising: means for tapping threads (610) along a portion of a passage in bone; means (320) for forming an enlarged cross-sectional portion of the passage; and means (418) for transitioning said means for forming between a retracted configuration for extending through the threaded portion of the passage and an expanded configuration for forming the enlarged cross-sectional portion of the passage.

Regarding claim 25, Spievack discloses a surgical instrument, comprising: an elongate member (220) extending along an axis and including an expandable portion (320) having at least one cutting element transitionable between an axial orientation for forming an axial passage in bone and an angular orientation for enlarging a portion of the axial passage (Column 6 lines 35-45).

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,306,284 to Agee et al. U.S. Patent No. 6,440,138 to Reiley et al.

U.S. Patent No. 5,562,665 to Young U.S. Patent No. 6,575,978 to Peterson et al.

U.S. Patent No. 5,620,456 to Sauer et al. U.S. Patent No. 6,679,886 to Weikel et al.

U.S. Patent No. 6,383,188 to Kuslich et al.

Art Unit: 3731


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica R Baxter whose telephone number is 703-305-4069. The examiner can normally be reached on M-F 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

rub  
rb

Jessica R Baxter  
Examiner  
Art Unit 3731

  
MICHAEL J. MILANO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700